



AGENCY: INDIANA DEPARTMENT OF ENVIRONMENTAL

MANAGEMENT (IDEM)

TITLE: 2010 DIESELWISE INDIANA - CLEAN DIESEL

ACROSS INDIANA

ACTION: GRANT ANNOUNCEMENT FOR SOLICITATION OF

CLEAN DIESEL PROJECTS

DATES: The closing date for receipt of applications is September 30, 2010, 5:00 p.m. EDT. Grant applications may be submitted via postal or express overnight mail, or electronically. Grant applications submitted via postal or express overnight mail must be postmarked by the closing date. What constitutes a grant application is described in Section IV, B below. Electronic grant applications must be submitted in Microsoft Word or PDF format to Shawn M. Seals at Seals@idem.IN.gov. Electronic submissions will be considered timely upon receipt, not transmission. An e-mail response confirming receipt of electronic applications will be provided. Facsimile and late submissions will not be accepted.

SUMMARY: This action announces grant availability for projects designed to significantly reduce diesel emissions across Indiana.

FUNDING and AWARDS: The total estimated funding for this competitive grant opportunity is in excess of \$750,000. IDEM anticipates awarding cooperative agreements from this announcement ranging from \$25,000 to \$250,000, subject to availability of funds and the quality of proposals received. Additional funds may be available in the near future. Project proposals submitted under this grant announcement may be awarded funding from these additional funds.

Preference will be given to applicants that are willing to provide a financial match and/or in-kind match (over and above any required matches as detailed in Section I, B below), provide actual historic idling hours pre-installation and post installation of idle reduction technologies, along with a commitment to maximize the use of any installed diesel emission reduction technology.

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Section I – Grant Opportunity Description

A. Background

IDEM's DieselWise Indiana program is announcing grant opportunities for clean air projects that will significantly reduce diesel emissions in the State of Indiana. As a member of the Midwest Clean Diesel Initiative (MCDI), IDEM has implemented clean diesel projects on over 2,100 vehicles across Indiana with a total investment of over \$3,000,000. Funding for this DieselWise Indiana program will be in the form of cooperative agreements, which must be used to achieve significant reductions in diesel emissions in terms of (1) tons of pollution produced; and (2) diesel emissions exposure, particularly from fleets operating in areas designated by the United States Environmental Protection Agency (U.S. EPA) as air quality nonattainment or maintenance areas. The projects should also maximize the preservation and/or creation of jobs and economic recovery.

The effect of diesel emissions on air quality and human health is a concern to IDEM and the citizens of Indiana. IDEM began an initiative to reduce diesel emissions state-wide in 2000. IDEM's early focus was on reducing diesel emissions in Northwest Indiana. This initiative is commonly referred to as the Northwest Indiana Diesel Emissions Initiative. Lake, LaPorte, and Porter counties have a high volume of heavy-duty diesel traffic, a large number of long-term parking facilities, and a high amount of long-term idling. This area also contains a large population with many residential neighborhoods located in close proximity to these facilities. In partnership with the School Transportation Association of Indiana (STAI), IDEM introduced a voluntary reduced idling program. This policy was unanimously adopted by STAI members at the annual conference in 2004. In 2005, IDEM introduced the DieselWise Indiana program to take the clean diesel lessons learned in Northwest Indiana across the remainder of the state. Since that time, the DieselWise Indiana program has worked with municipal, school, and public transportation entities across Indiana to retrofit vehicles with diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), and idle reduction technologies. The DieselWise Indiana program has also provided funds for clean diesel projects at Indiana port and rail facilities. All of these projects have dramatically reduced harmful diesel emissions and improved the quality of life for Indiana citizens residing in the area.

B. Scope of Work

Eligible projects may include onroad or nonroad diesel powered equipment. Eligible diesel emission reduction technologies include, but are not limited to, exhaust retrofit technologies, idle reduction technologies, diesel engine upgrades, repowers, diesel vehicle replacements, aerodynamic technologies, and low rolling resistance tires. The emission reduction technologies listed above may only include technologies that are certified or verified by the California Air Resources Board (CARB) or the U.S. EPA. The CARB Verified Technology list can be found at: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm. U.S. EPA's Verified Technology List is located at http://www.epa.gov/otaq/retrofit/verif-list.htm.

Diesel Emissions Reduction Solution Proposal Areas

Exhaust Retrofit Technologies: A "retrofit" project is defined broadly to include any technology, device or system that when applied to an existing diesel engine achieves emission reductions beyond that required by U.S. EPA regulations at the time of the engine's certification. Retrofit technologies may include, but are not limited to, the following: U.S. EPA-verified emission control technologies (for example, those installed in the exhaust system like DOCs and DPFs or systems that include crankcase control, like a closed crankcase filtration system, and engine recalibrations); and California Air Resources Board (CARB) verified emission control technologies. This funding may cover up to 100% of the costs for these emission reduction technologies. The CARB-verified technology list can be found at: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm. U.S. EPA's Verified Technology List is located at http://www.epa.gov/otaq/retrofit/verif-list.htm.

Idle Reduction Technologies: An idle reduction project is defined as the installation of a technology or device to onroad or nonroad diesel powered engines that is designed to provide services (such as heat, air conditioning, or electricity) to vehicles and equipment that would otherwise require the operation of the main drive engine while the vehicle is temporarily parked or remains stationary or that reduces unnecessary idling of such vehicles or equipment. The reduction in idling must also lower emissions. This funding may cover up to 75% of the costs for these emission reduction technologies. U.S. EPA has verified four categories of idle reduction technologies: (1) auxiliary power units and generator sets; (2) battery air conditioning systems and thermal storage systems; (3) electrified parking spaces (truck stop electrification); and (4) fuel operated heaters. To determine if a particular technology fits under one of these categories please see http://www.epa.gov/otaq/smartway/transport/what-smartway/verified-technologies.htm.

Diesel Engine Upgrades: Some engines may be able to be upgraded to reduce their emissions by applying manufacturer recommended upgrades or kits to certified or verified configurations. This funding may cover up to 100% of the cost of an engine upgrade. (Please note that the upgrade must be with a manufacturer's kit listed in U.S. EPA or CARB's verified lists, or a U.S. EPA certified configuration.) **Note**: This funding cannot be applied to the entire cost of an engine rebuild, but only the emissions-reducing upgrade kit.

Diesel Engine Repowers: Repower refers to the removal of an existing engine and replacing it with a newer or cleaner engine that meets a more stringent set of engine emissions standards. Repowers may include engine replacement for use with a cleaner fuel such as compressed

natural gas, re-calibrations, or other components or the addition of newer, cleaner technologies to reduce the emissions from the engines. IDEM is particularly interested in engine repowers that include combined, verified improvements which will further reduce emissions (e.g., through the addition of verified retrofit technologies such as DOCs, DPFs or crankcase emission control). This funding may cover up to 75% of the cost of an engine repower. Please see the note below regarding repower and replacement proposals for additional eligibility requirements, such as original engine disposal requirements.

Diesel Vehicle and Equipment Replacements: Onroad and nonroad diesel vehicles and equipment can be replaced under this program with newer, cleaner vehicles and equipment that operate on diesel or alternative fuels and meet a more stringent set of engine emissions standards. Replacement projects can include the replacement of diesel vehicles and equipment with newer, cleaner diesel, hybrid or alternative fuel vehicles or equipment. These projects can also include the replacement of nonroad vehicles or equipment with highway models if the engine's operating cycles make the replacement technically feasible. IDEM encourages the replacement of older vehicles and equipment containing engines that were manufactured prior to the implementation of emissions standards. As with engine replacements, proposals must specify how the vehicles or pieces of equipment will be disposed of. This funding may cover the incremental costs of new vehicles and equipment. Incremental costs are defined as up to 25% of the cost of the new vehicle or equipment (except for school buses—see provision below). Please see the note below regarding repower and replacement proposals for additional eligibility requirements, such as original engine, vehicle, or equipment disposal requirements.

Replacements for Diesel School Buses: Funding levels may cover up to 25% or 50% of the cost of a replacement school bus, depending on the engine emission certification levels.

- 1) Twenty-five percent level: This funding may cover up to 25% for school buses with engines manufactured in model years 2007, 2008 or 2009 that are particulate filter-equipped in the case of diesel engines or catalyst-equipped in the case of CNG engines and satisfy regulatory requirements for school bus engines manufactured in that model year and do not exceed the limits of particulate matter (PM) at 0.01, nitrogen oxides (NOx) at 2.0, and non-methane hydrocarbons (NMHC) at 0.40 (expressed in grams per brake horsepower hour, g/BHP-hr).
- 2) <u>Fifty percent level</u>: This funding may cover up to 50% of the cost of a replacement school bus with engines that satisfy 2010 model year regulatory limits for emissions of PM, NOx and NMHC. The model year 2010 regulatory requirements are: PM at 0.01 g/BHP-hr, NOx at 0.20 and NMHC at 0.14.

Repower and Replacement Proposals are eligible for funding on the condition that the following criteria are satisfied:

• The purchase of new vehicles or equipment to expand a fleet is not covered by this program;

- This program funds the early replacement of vehicles, engines or equipment (i.e. vehicle, engine or equipment that has over two (2) years of useful life remaining). Vehicle, engine, or equipment replacements that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this program;
- The vehicle, engine, or equipment being replaced will be scrapped or the replaced engine would be returned to the original engine manufacturer for remanufacturing to a cleaner standard;
 - Drilling a hole in the engine block and manifold while retaining possession of the engine is an acceptable scrapping method. Other methods may be considered. Evidence of appropriate disposal is required in a final assistance agreement report submitted to IDEM;
- The replacement vehicle, engine, or equipment will perform the same function as the vehicle, engine, or equipment that is being replaced (e.g., an excavator used to dig pipelines would be replaced by an excavator that continues to dig pipelines);
 and
- O The replacement vehicle, engine, or equipment will be of the same type and similar gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced (e.g., a 300 horsepower bulldozer is replaced by a bulldozer of similar horsepower).

Verified Aerodynamic Technologies: Trailer aerodynamic devices include gap fairings that reduce the gap between the tractor and the trailer to reduce turbulence, trailer side skirts that minimize wind under the trailer, and trailer rear fairings that reduce turbulence and pressure drop at the rear of the trailer. To improve fuel efficiency, legacy fleets can be retrofitted with aerodynamic trailer fairings or the fairings can be provided as new equipment options. IDEM is particularly interested in projects that combine aerodynamic technologies with verified retrofit technologies which will further reduce emissions, e.g., through the addition of exhaust controls such as a DOC, DPF or crankcase emission control. This funding may cover up to 100% of the cost (labor and equipment) for aerodynamic trailer fairings - either individually or in combination with one another (e.g., skirt & either gap reducer or rear fairings). A list of U.S. EPA verified aerodynamic technologies is available at http://www.epa.gov/smartway/transport/what-smartway/verified-technologies.htm#advanced. Advanced aerodynamic technologies are not eligible for funding if installed on trucks that have

Verified Low Rolling Resistance Tires: Certain tire models can provide a reduction in NOx emissions and fuel savings, relative to the "best selling" new tires for line haul trucks, when used on all three axles. The options offered include both dual tires and single wide tires (single wide tires replace the double tire on each end of a drive or trailer axle, in effect turning an "18" wheeler into a "10" wheeler). Low rolling resistance tires can be used with lower-weight aluminum wheels to further improve fuel savings. IDEM is particularly interested in projects that combine these tires with verified retrofit technologies which will further reduce emissions, e.g., through the addition of exhaust controls such as a diesel particulate filter, diesel oxidation catalyst or crankcase emission control. This funding may cover up to 100% of the costs (labor and equipment) for low rolling resistance tires. A list of U.S. EPA verified low rolling resistance

NOx aftertreatment.

tires is available at http://www.epa.gov/smartway/transport/what-smartway/verified-technologies.htm#tires. Low rolling resistance tires are not eligible for funding if installed on trucks that have NOx aftertreatment or in the case where low rolling resistance tires have already been installed on the truck.

Following project implementation, IDEM will monitor the applicants to ensure that the emission and fuel consumption goals are met (as set forth in Section I,C below). For a period of 12 months after project completion, applicants shall be required to provide a quarterly report to IDEM that outlines how the project has met the terms and conditions of the grant agreement.

The grant(s) will not fund any of the following costs:

- The cost of shipping of an onroad or nonroad idle reduction technology unit(s) or the exhaust retrofit technology unit(s) from the manufacturer to the facility where the equipment will be installed.
- The cost of operating, maintaining and insuring the onroad or nonroad idle reduction technology unit(s) or the exhaust retrofit technology unit(s).

Eligible Projects: Summary of what IDEM's DieselWise Indiana Program May Fund

- Verified Retrofit Technologies Up to 100% of the cost of diesel retrofit technologies.
- Verified Idle Reduction Technologies Up to 75% of the cost of idle reduction technologies.
- Certified Diesel Engine Upgrades Up to 100% of the cost of diesel engine upgrades.
- o Certified Engine Repowers Up to 75% of the cost of a diesel engine repower.
- Certified Vehicle, Engine, or Equipment Replacement Up to 25% of the cost of a new vehicle or piece of equipment (except for school buses; see below).
 - School Bus Replacement:
 - For buses that meet U.S. EPA's 2007 emissions standards, IDEM may fund up to 25% of the cost of a replacement school bus.
 - For buses that meet U.S. EPA's 2010 emissions standards, IDEM may fund up to 50% of the cost of a replacement school bus.
- Verified Aerodynamic Technologies Up to 100% of the cost of aerodynamic technologies.
- Low Rolling Resistance Tires Up to 100% of the cost of low rolling resistance tires.

C. Anticipated Outcomes

Through these projects the IDEM program anticipates the following benefits:

o Provide an example of the benefits of onroad or nonroad emission reduction technologies that can be implemented in other areas and applications.

- o Improved air quality via the reduction of NOx, HC, CO, PM and air toxic emissions from medium- and heavy-duty diesel engines.
- Reduced fuel and oil consumption and other fluid or solid waste from idling diesel vehicles.
- o Reduced maintenance costs associated with diesel vehicle idling.
- o Reduced noise levels associated with diesel vehicle idling.
- o Improved quality of life for the population residing in close proximity to the areas where diesel equipment operation is common.
- After these projects are fully implemented the DieselWise Indiana program will
 have the ability to assess the benefits of these projects for marketing similar diesel
 emission reduction strategies in the future.

Section II – Award Information

A. What is the Amount of Funding Available?

The total estimated funding for this competitive grant opportunity is in excess of \$750,000. IDEM anticipates awarding cooperative agreements from this announcement ranging from \$25,000 to \$250,000, subject to availability of funds and the quality of proposals received. Additional funds may be available in the near future. Project proposals submitted under this grant announcement may be awarded funding from these additional funds.

B. Funding Allocations

Note: Although an applicant may receive multiple awards, no individual award shall exceed \$250,000 dollars.

The number and amount of awards, and projected categorical funding allocations, are subject to both available funds and the quality of the proposals submitted. IDEM reserves the right to partially fund proposals by funding discrete activities, portions, or phases of the proposed projects. If IDEM decides to partially fund the proposal, it will do so in a manner that does not prejudice any Grantee or affect the basis upon which the proposal was evaluated and selected for award, and that maintains the integrity of the competition and the evaluation process.

The awards resulting from this solicitation will result in a formal agreement between the Grantee and IDEM. IDEM's DieselWise Indiana program role will be as follows:

- Close monitoring of the successful Grantee's performance to verify the results proposed by the Grantee;
- o Collaborate during the performance of the scope of work;
- o Approve substantive terms of proposed grants and contracts;
- o Review qualifications of Grantee's and contractor's key personnel;

- Review and verify information contained in reports prepared under the cooperative agreements; and
- Reimbursement in arrears of monies spent by the Grantee after the project has been completed and fully implemented. All payment obligations will be made in arrears in accordance with Indiana law and state fiscal policies and procedures.

C. What is the Project Period for Awards Resulting from this Solicitation?

All projects implemented as a result of grant awards under this program must be completed by September 30, 2011, to qualify for reimbursement.

D. Are Matching Funds Required?

No. However, preference will be given to proposals that include a financial cost-share or in-kind match. This will enable IDEM to maximize the total funds available. Please refer to Section V, A, Application Review Information, for further information.

Section III – Eligibility Information

Eligible Entities

This is a competitive grant program open to private and public entities. Public entities, for example, may include school bus fleets, city bus fleets, public works and sanitation fleets. Private entities may include private bus fleets, private trucking companies with a local hub and localized routes, industrial equipment, and nonroad equipment or machinery (i.e. construction equipment).

Section IV – Application and Submission Information

A. How to Apply

An electronic copy of this solicitation for clean diesel projects can be requested from Shawn M. Seals at (317) 233-0425 or Seals@idem.IN.gov. Copies may also be downloaded from the DieselWise Indiana Web site at http://www.in.gov/idem/5255.htm.

B. Content and Form of Application Submission

The grant application must contain the following information, preferably in the sequential order shown:

- 1. Signed cover letter on the applicant's letterhead that briefly summarizes the applicant's proposal (the signature must be original).
- 2. If the applicant is a privately-owned entity, the application must include a completed and signed copy of the Minority and Women's Business Enterprise Participation Plan Form and the Indiana Economic Impact Proposals and Contracts Form. These forms will be made available through the DieselWise Indiana Web page.
- 3. Narrative Work Plan. This document, a maximum of 10 pages in length, must conform to the following outline:
 - a. *Project Title*.
 - b. *Category:* Each project proposal must clearly identify which of the diesel emission reduction project categories the applicant wishes to pursue as defined in Section I, B of this grant announcement.
 - c. *Grantee Information:* Include applicant (organization) name, address, contact person, phone number, fax, and e-mail address.
 - d. *General Fleet Information:* How many vehicles will be improved, current mileage or operating hours, estimated monthly operating hours, estimated monthly idle time, estimated monthly fuel consumption, estimated monthly use (in miles or hours), vehicle make, vehicle model year, and estimated years to remain in the active fleet.
 - e. Funding Requested: Specify the amount of monies being requested from IDEM's DieselWise Indiana program.
 - f. *Total Project Cost:* Specify total cost of the project (including IDEM's DieselWise Indiana program funding and cost-share). Identify funding from other sources including any in-kind resources.
 - g. *Project Period:* Provide beginning and ending dates (for planning purposes, Grantees should assume funds will be available by no later than 90 days after notification of award. All projects must be completed no later than September 30, 2011).
 - h. *Project Description:* Explicit description of how the proposed project meets the category-specific guidelines established in Section I, B, Scope of Work, to include:
 - A detailed project summary, description of specific actions and methods to be undertaken and the estimated timeline for each project.
 - 2. An explanation of how the project benefits air quality for citizens of Indiana.
 - 3. An explanation of how the project creates or preserves jobs for citizens of Indiana (including numbers of jobs positively affected).
 - 4. A plan for tracking and measuring the progress toward achieving the expected outcomes identified in Section I, C of this announcement.
 - 5. An explanation of how project success will be evaluated.

- 6. A detailed summary describing the physical location(s) where diesel equipment operation occurs (i.e. place of business, warehouse(s), truck routes, etc.) and the hours per month operation occurs.
- 7. A description of the roles of the Grantee and partners, if any.
- 8. Contact information for all key personnel.
- 9. To the extent not covered above, information to address the evaluation criteria listed in Section V.
- 10. A detailed itemized budget specifying the project costs that will be incurred by the applicant (to include IDEM's DieselWise Indiana program funds as well as cost-share and in-kind).
- 11. A detailed fleet description of the vehicles to be improved through this grant program. This information must be provided by completing the DieselWise Indiana Fleet Sheet (DIFS). Information included in the DIFS will not count towards the 10-page limit of the narrative work plan.

C. Submission Dates and Times

- 1. Grant applications may be submitted via postal or express overnight mail, or electronically. Grant applications submitted via postal or express overnight mail must be post marked by the closing date. Electronic grant applications must be submitted in Microsoft Word or PDF format to Shawn M. Seals at Seals@idem.IN.gov. Electronic submissions will be considered timely upon receipt, not transmission. An e-mail response confirming receipt of electronic proposals will be provided. Facsimile and late submissions will not be accepted.
- 2. IDEM's DieselWise Indiana program highly recommends that applicants who do not submit their grant applications electronically use a service that requires IDEM to sign off when receiving the application package. Grant applications should be sent to:

Indiana Department of Environmental Management Attn: Shawn M. Seals, DieselWise Indiana 100 North Senate Avenue Mail Code 61-50 IGCN 1003 Indianapolis, IN 46204-2251

3. IDEM proposes the following estimated timeline:

Project Milestone	Date of Completion	Total Accumulated Time from Posting
Proposal Receipt Deadline	September 30, 2010	10 Weeks
Proposal Review, Prioritization, and Selection	October 15, 2010	12 Weeks
Selected Proposal Notification	October 22, 2010	13 Weeks

Grant Agreements Fully Executed	November 26, 2010	18 Weeks
All Projects Complete and Fully Implemented	September 30, 2011	62 Weeks

Section V – Application Review Information

Each eligible application package will be evaluated according to the criteria set forth below. Application packages that directly and explicitly address these criteria will have a greater likelihood of being selected for an award. Each application package will be rated under a points system, with a total of 100 points possible. An additional 5 points are possible for Indiana owned and operated enterprises, as well as an additional 5 points for a commitment to purchase and install equipment with a direct Indiana business benefit. Projects will be evaluated and scored based on the following criteria:

A. Evaluation Criteria.

Criteria	
Project's total emission reduction potential (based on type and use of vehicle).	
Reduction in fuel and oil consumption and other fluid or solid wastes from idling diesel engines.	
Level of commitment from the equipment owner/operator. This includes the willingness of the owner/operator to provide a financial match to leverage grant funds and/or provide an in-kind match, as well as a documented commitment to ensure project goals are met.	
Proximity to sensitive populations such as daycare facilities, schools, nursing homes, and residential areas.	10
Project's potential to promote job creation and/or preservation and economic recovery in Indiana.	10
Term remaining of useful vehicle life.	10
Willingness to establish and enforce an Idle Restriction and Use Policy to maximize the use of onroad or nonroad idle reduction technologies and exhaust retrofit technologies.	
Active participant in the State of Indiana Minority and Women Business Enterprise Participation Plan (see attached MBE/WBE documentation).	
BONUS: Bonus points will be provided to Indiana owned and operated business enterprises (see attached Indiana Economic Impact documentation).	5

BONUS: Bonus points will be provided for a commitment to purchase and	5
install equipment with a direct Indiana business benefit.	

Disclaimer

The Indiana Department of Environmental Management accepts no obligation for costs incurred by the applicant in anticipation of being awarded a grant. The State creates no obligation expressed or implied by issuing this Grant Announcement for Solicitation of Clean Diesel Projects Across Indiana or by receipt of any projects submitted. The award of any grant monies shall be at the sole discretion of IDEM's DieselWise Indiana program. Neither this grant announcement nor any response resulting from this announcement is to be construed as a legal offer.

Questions regarding this Grant Announcement for Solicitation of Clean Diesel Projects Across Indiana may be directed to Mr. Shawn M. Seals at (317) 233-0425 or SSeals@idem.IN.gov.